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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/751,084

01/02/2004

James J. Macor

CET0401

1325

7590

02/17/2005

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EXAMINER

NGUYEN, ANTHONY H

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/751,084

Applicant(s)

MACOR, JAMES J.

Examiner

Anthony H. Nguyen

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

Claims 21-28, 39 and 40 are objected to because the language “so as to substantially maximize the spacing of said twelve depressible areas, while, substantially minimizing the spacing of said principle buttons” (claims 21 and 39, lines 10 and 11) is functional and vague in that it is unclear how the spacing of the buttons can be minimized while the spacing of the twelve depressible areas of the buttons are maximized.

***Claim Rejections - 35 USC § 112***

Claims 30, 35-38 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as original filed, does not provide support for the invention as now claimed. Specifically, the specification does not teach “the depressible areas of each of said button are positionally rotated about 45 degrees relative to the positioning of the depressible areas of an adjacent button” as recited in the claims.

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21- 40 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Crisan (US 2003/0121964 A1) in view of Strauch et al. (US 5,861,823).

With respect to claims 21, 22-24,26,27, 29-33, 35-37, 39 and 40, Crisan teaches a keypad having three principle buttons or keys capable of performing twelve switch operations as shown in Figs.6 and 9 of Crisan (see, also, page 3, paragraph 0034, line 6). Crisan does not clearly teach the four tactile depressible areas. However, Strauch et al. teaches a keypad having multifunction keys comprising at least four tactile depressible areas which are positioned around an imaginary cetral axis 120. The keys transmit tactile sensation to the users' fingers (Strauch et al., col.5 lines 52-54). In view of the teaching of Strauch et al., it would have been obvious to one of ordinary skill in the art to modify the buttons or keys of Crisan by substituting the keys as taught by Strauch et al. to improve the efficiency of operating or typing on a keypad.

With respect to claims 25, 28, 34 and 38, Crisan teaches all that is claimed, except the button or key having a raised structure. Strauch et al. teaches a key 80 having a raised structure 88 to provide additional tactile sensation (Fig.5 and col.5 lines 55 and 56). Therefore, it would have been obvious to one of ordinary skill in the art to modify the button or key of Crisan by providing the key having a raised structure as taught by Strauch et al. for convenience of typing.

***Response to Arguments***

Applicants' arguments filed on December 3, 2004 have been fully considered but they are not persuasive of any error in the above rejection.

Applicant argues that Crisan does not teach the small keypad having the buttons formed of four tactile depressible areas positioned around an imaginary central axis as recited in the claims.

However, as explained above, Crisan clearly teaches the keypad having three principle buttons which are capable of performing twelve distinct electronic switch operations. For example, the buttons are formed of four depressible areas 1,2,3,4 positioned around an imaginary central axis as shown in Fig.6. Also, Strauch et al. teaches the conventional use of a button which are formed of four tactile depressible areas positioned around an imaginary central axis 120 as shown in Figs.6 and 7.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore, the combination of Crisan and Strauch et al. renders obvious the structure as recited in claims.

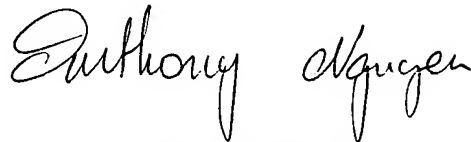
Art Unit: 2854

*Conclusion*

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168. The fax phone number for this Group is (703) 872-9306.



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2/15/05  
Patent Examiner  
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